

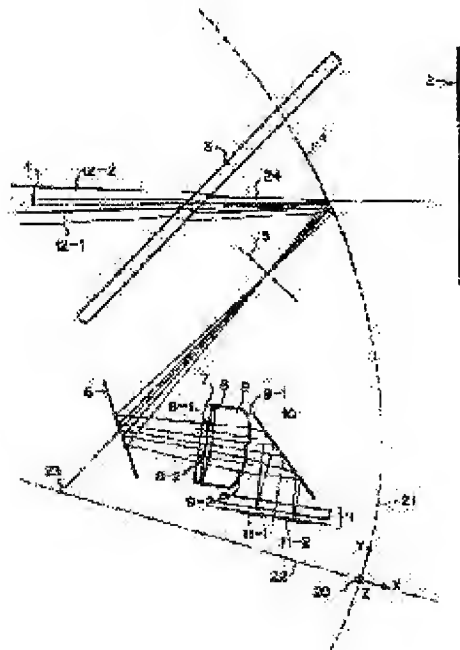
PATENT ABSTRACTS OF JAPAN

(11)Publication number : **10-104503**
(43)Date of publication of application : **24.04.1998**

(51)Int.Cl. **G02B 7/34**
G03B 13/36
G03B 27/34

(21)Application number : **08-256289** (71)Applicant : **CANON INC**
(22)Date of filing : **27.09.1996** (72)Inventor : **NAGATA KEIJI**
KADOHARA
TERUTAKE
SUDA YASUO
YAMASHITA
KENICHIRO
OTAKA KEIJI

(54) **FOCUS DETECTOR**



(57)Abstract:

PROBLEM TO BE SOLVED: To reduce the distortion of an image by arranging adjacent photoelectric transducer trains in a relation in which their phases with respect to an object image are shifted and performing a focus detection based on focus detection information of the plural photoelectric transducer trains to improve the variation of focus detections to be generated by a phase in/phase out.
SOLUTION: This device is constituted of a photoelectric

transducer element 11 having a silver salt-contg. film 2, a semitransmission main mirror 3, reflection mirrors 4, 6, 10, an IR cutting filter 7, a diaphragm 8, a second order image formation system 9 and two area sensors 11-1, 11-2 or the like. In this device, adjacent photoelectric transducer trains are arranged in a relation in which they are shifted with each other with respect to luminous fluxes from an object to be photographed by the prescribed pitch of the photoelectric transducer 11 and one focus detection value is obtained based on a defocusing amount to be detected from outputs of plural adjacent photoelectric transducer trains. Thus, even when a focus detecting range is expanded, a constant defocusing amount is made detectable by preventing the influence of the variation of focus detections to be generated phase in/phase out.